PRASHANT PRASAD KANTH

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EDUCATION

MSc, Computer Science	*Rutgers University-New Brunswick (CGPA: 4.0)*	**Sep 2021 - May 2023**
BE, Computer Science and Engineering	*Bangalore Institute of Technology (Percent: 77)*	**Aug 2013 - Jun 2017**

Relevant Courses: DBMS, Data Structures and Algorithms, Artificial Intelligence, Computer Vision, Massive Data Storage

PROFESSIONAL EXPERIENCE

Artrendex | New Jersey, US   **Jun 2022 – Sep 2022**
Machine Learning Research Intern (tech: Python, PyTorch, OpenCV, Tensorboard, Numpy, Pandas, skimage)
- Improved reusability of data pipeline by generalising pre-processing and overriding PyTorch's Dataset class to reduce manual labor by 10%
- Performed transfer learning on deep learning models like VGG and achieved 94% test accuracy
- Researched on positional embedding options for image patch sequencing involving Vision Transformers
- Explored 3D CNN variation of Resnet, 'R3D-18', for art classification

Rutgers University | New Jersey, US   **Feb 2022 - May 2022**
Teaching Assistant (Discrete Mathematics)
- Tutored a class of 50 students on concepts of combinatorics and probability

Oracle | Bangalore, India   **Jul 2017 - Jun 2021**
Cloud Consultant (tech: Oracle SQL, Relational Databases, Java, Oracle BI, MS Excel, XML)
- Lead integration and report development track from planning phase to production deployment
- Developed 50+ SQL reports to be used in client's production environment for ETL operations
- Remodelled Java automation program by integrating with REST APIs to bring down manual effort data migration by 20%
- Built "Text2File Generator" using Java Swing/AWT, reducing data migration time by almost 75%
- Conducted training sessions for 40+ new hires

PROJECTS

Querying on Streaming Data | (tech: Python, Apache Spark, boto3, matplotlib**)**   **Oct 2022 - Nov 2022**
- Reduced 30% pre-processing time on approx. 130GB (40M records) of data using MapReduce and saved significant storage space by writing data into parquet format
- Designed a pipeline using Apache Spark in python to consume streaming data and provide real-time visualization on top scholarly works using matplotlib animation

Facial Sketch to Colored Images Using GANs | (*tech: Python, PyTorch, NumPy, OpenCV***)**   **Feb 2022 - Apr 2022**
- Implemented 3 variations of conditional image generative models, GANs, involving U-Net architecture
- Refined 2 datasets to allow the network to learn more facial representative features leading to better results

Character Recognition | (*tech: Python, skimage, NumPy, seaborn***)**   **Feb 2022 - Feb 2022**
- Devised a character recognition model to achieve 83% test accuracy using concepts of image processing
- Employed nearest neighbour with 14 features like hu moments and symmetrical properties for recognition

The Imitation Game | (*tech: Python, Keras, NumPy, Pandas, matplotlib***)**   **Oct 2021 - Nov 2021**
- Achieved 98% and 99% accuracy on ANN and CNN respectively to mimic an agent's movement in maze.
- Collected training data from 3-different implementations of maze runner using repeated A-star algorithm

Smart Health Prediction using Naive Bayes Classifier | (tech: *Java, JDBC, HTML, CSS***)**   **Feb 2017 - Jun 2017**
- Integrated backend and middleware easing data access for user classification into 3 categories: Lung Cancer, Thyroid and Hypertension
- Supported in web development for data entry of new users and displaying collected statistics charts

TECHNICAL SKILLS

Languages: Python, SQL, Java, R, MATLAB, C, C++, HTML, JavaScript | **Operating Systems:** Windows, Linux, MacOS
IDEs: VS Code, Jupyter Notebook, Spyder | **Frameworks and Tools:** PyTorch, sklearn, skimage, OpenCV, NumPy, Pandas, PySpark, Matplotlib, Git

CERTIFICATIONS

- Introduction to NoSQL Databases – Coursera | IBM	**Sep 2022**
- Machine Learning - authorized by Stanford online and offered through Coursera	**Jun 2022**
- Oracle Database SQL Certified Associate	**Jul 2020**
- Oracle Cloud Infrastructure Foundations Certified Associate	**Jul 2020**